

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Currently Amended) In a multi-tenant duplexed call-management system, said system hosting a plurality of processes, including a plurality of tenant application processes and a plurality of system processes, a method of configuring and monitoring said processes on said system, the method comprising:

configuring said system in a configuration file, said configuring including:

defining dependencies between said plurality of processes,

defining a monitoring frequency for each of said plurality of processes,

defining a priority for each of said plurality of processes, and

grouping selected processes of said plurality of processes into tenant groups;

reading said configuration file by the call-center system;

starting each of said plurality of processes in said duplexed call-center system in correspondence to said dependencies and said priorities, wherein said duplexed call-center system includes a first call-management system and a secondary call-management system similar to the first call-management system;
and

monitoring each of said plurality of processes based on said monitoring frequencies including:

controlling each of said duplexed call-management systems with a respective High Availability (HA) Server process running on one node of each of said duplexed call-management systems,

monitoring processes on each of said nodes under control of said HA Server process with a respective HA Monitor process running on the same node as said monitored processes, said HA Monitor process broadcasting a respective state of each of said monitored processes to

all remaining nodes,

starting and stopping selected processes of said monitored processes with a respective HA Spawner process running on the same node as said monitored processes in response to requests from said HA Server process, said HA Monitor process and an HA Master process,

watching said HA Server process, said HA Monitor process and said HA Spawner process with an HA Master process running on the same node as the respective HA Server process, HA Monitor process and HA Spawner process, starting and stopping said watched processes in response to states of said watched processes, and

watching said HA Master process with an HA Master Watcher process running on the same node as the respective HA Master process, said HA Master Watcher process starting and stopping said watched HA Master process in response to a state of said HA Master Process.

2. (Canceled)

3. (Currently Amended) The method as set forth in claim 1 [[2]], wherein the configuring further includes defining a run status for each of said plurality of processes comprising:

defining selected processes of said plurality of processes as cold-standby run status, wherein one copy of the selected process runs on one of the duplexed call-management systems while the remaining copy remains stopped or idle on the remaining call-management system;

defining selected processes of said plurality of processes as warm run status, wherein one copy of the selected process runs on one of the duplexed call-management systems while the remaining copy runs on the remaining call-management system, however, one of the copies is inactive;

defining selected processes of said plurality of processes as hot run

status, wherein both copies of the selected application run, however, with one copy in standby, but with its state kept current with a state of the remaining copy; and

defining selected processes of said plurality of processes as load sharing run status, wherein both copies of the selected process run and actively handle requests, sharing the overall load.

4. (Canceled)

5. (Previously Amended) The method as set forth in claim 3, wherein each of said duplexed call-management system includes one or more load-sharing nodes, each node hosting selected processes.

6. (Canceled)

7. (Canceled)

8. (Currently Amended) The method as set forth in claim 1 [[6]], wherein the monitoring further includes:

watching said HA Master Watcher process with said HA Master process running on the same node as the respective HA Master Watcher process, said HA Master process starting and stopping said watched HA Master Watcher process in response to a state of said HA Master Watcher process.

9. (Currently Amended) A multi-tenant duplexed call-management system, the system comprising:

a first call-management system including:

a storage system for storing database files, processes and a configuration file₁[[:]]

a computer system having memory for processing said database files and said configuration file and running selected processes stored on said storage system₁[[:]]

a configuration server for reading said configuration file and serving configuration file data from said configuration file to requesting processes,[[:]] and

a monitor process for starting configured processes according to inter-process dependencies and process priorities as set forth in said configuration file, and for monitoring each of said started processes according to a respective monitor frequency in said configuration file,

a second call-management system similar to the first call-management system, wherein the first and second call-management systems are duplexed call-management systems;

an High Availability (HA) Server process running on one node of each of said duplexed call-management systems controlling each of said duplexed call-management systems;

a HA Monitor process running on each of said nodes under control of said HA Server process with said HA Monitor process monitoring processes running on the same node as said HA Monitor process, said HA Monitor process broadcasting a respective state of each of said monitored processes to all remaining nodes;

an HA Spawner process starting and stopping selected processes of said monitored processes with a respective HA Spawner process running on the same node as said selected process in response to requests from said HA Server process, said HA Monitor process and an HA Master process;

an HA Master watching said HA Server process, said HA Monitor process and said HA Spawner process running on the same node as the respective HA Master process, starting and stopping said watched processes in response to states of said watched processes; and

an HA Master Watcher process watching said HA Master process running on the same node as the respective HA Master Watcher process, said HA Master Watcher process starting and stopping said watched HA Master process in response to a state of said HA Master Process.

10. (Canceled)

11. (Previously Presented) The multi-tenant call-management system as set forth in claim 9, wherein the call-management system is a duplexed system further including a second call-management system similar to the first call-management system and each of said call-management systems includes one or more nodes for sharing a processing load.

12. (Canceled)

13. (Canceled)

14. (Currently Amended) The multi-tenant call management system as set forth in claim 9 [[12]], wherein said HA Master process watches said HA Master Watcher process running on the same node as the respective HA Master process, said HA Master process starting and stopping said watched HA Master Watcher process in response to a state of said HA Master Watcher process.

15. (Currently Amended) A call-center system, the system including:
a plurality of telephone lines;
a plurality of agent positions;
a call distribution system connecting said plurality of agent positions to said plurality of telephone lines; [[and]]
a multi-tenant first call-management system connected to the call distribution system, including:

a storage system for storing database files, processes and a configuration file defining dependencies between a plurality of processes, defining a monitoring frequency for each of said plurality of processes, defining a priority for each of said plurality of processes, and grouping selected processes of said plurality of processes into tenant groups₁[[,:]]

a computer system having memory for processing said database

files and said configuration files and running selected processes stored on said storage system,[[:]]

a configuration server for reading said configuration file and serving configuration file data from said configuration file to requesting processes,[[:]] and

a monitor process for starting configured processes according to inter-process dependencies and process priorities as set forth in said configuration file, and for monitoring each of said started processes according to a respective monitor frequency in said configuration file;

a second call-management system similar to the first call-management system, wherein the first and second call-management systems are duplexed call-management systems;

an High Availability (HA) Server process running on one node of each of said duplexed call-management systems controlling each of said duplexed call-management systems;

a HA Monitor process running on each of said nodes under control of said HA Server process with said HA Monitor process monitoring processes running on the same node as said HA Monitor process, said HA Monitor process broadcasting a respective state of each of said monitored processes to all remaining nodes;

an HA Spawner process starting and stopping selected processes of said monitored processes with a respective HA Spawner process running on the same node as said selected process in response to requests from said HA Server process, said HA Monitor process and an HA Master process;

an HA Master watching said HA Server process, said HA Monitor process and said HA Spawner process running on the same node as the respective HA Master process, starting and stopping said watched processes in response to states of said watched processes; and

an HA Master Watcher process watching said HA Master process running on the same node as the respective HA Master Watcher process, said HA Master Watcher process starting and stopping said watched HA Master process

in response to a state of said HA Master Process

16. (Canceled)

17. (Currently Amended) The call-center system as set forth in claim 15 [[16]], wherein each of said call-management systems includes one or more nodes for sharing a processing load.

18. (Canceled)

19. (Canceled)

20. (Currently Amended) The call-center system as set forth in claim 15 [[18]], wherein said HA Master process watches said HA Master Watcher process running on the same node as the respective HA Master process, said HA Master process starting and stopping said watched HA Master Watcher process in response to a state of said HA Master Watcher process.